Application No. Not Yet Assigned Paper Dated: November 19, 2003 In Reply to USPTO Correspondence of N/A Attorney Docket No. 1217-032260

AMENDMENTS TO THE ABSTRACT

Please replace the section heading and paragraph beginning at page 40, line 1, with the following rewritten title and paragraph:

-- ABSTRACT OF THE DISCLOSURE

The object of the present invention is to provide an An as-grown single crystal of calcium fluoride having a large diameter and small birefringence. The as-grown single crystal of calcium fluoride according to the present invention is obtained by a single crystal pulling method (Czochralski method), has a straight barrel part diameter of 17 cm or more, preferably has a straight barrel part length of 50 mm or more, and has a birefringence of not more than 3 nm/cm, preferably 0.1 to 2.0 nm/cm.--